


3/30/05

**ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18





Stylesheet Version v18.0

|                               |   |
|-------------------------------|---|
| <b>Title of<br/>Invention</b> | Slow-start Packet Scheduling Particularly Applicable to Systems<br>Including a Non-blocking Switching Fabric and Homogeneous or<br>Heterogeneous Line Card Interfaces |
|-------------------------------|---|

Application Number : 10/684282   
 Confirmation Number: 3340  
 First Named Applicant: Patrick Costello  
 Attorney Docket Number: 21863  
 Art Unit: ~~2664~~ 2616  
 Examiner: Wellington Chin  
 Search string: ( 4733390 or 5500858 or 5923644 or 6212182 or 20010043606 ).pn


**US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

| init  | Cite.No. | Patent No. | Date       | Patentee               | Kind | Class | Subclass |
|---|----------|------------|------------|------------------------|------|-------|----------|
|  | 1        | 4733390    | 1988-02-22 | Shirakawa et al.       |      | 370   | 461      |
|  | 2        | 5500858    | 1996-03-19 | Nicholas W.<br>McKeown |      | 370   | 412      |
|  | 3        | 5923644    | 1999-07-13 | McKeown et al.         |      | 370   | 230      |
|  | 4        | 6212182    | 2001-04-03 | Nicholas W.<br>McKeown |      | 370   | 390      |

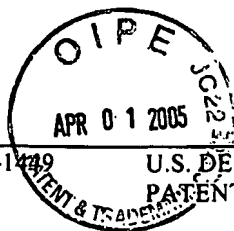
**US Published Applications**

Note: Applicant is not required to submit a paper copy of cited US Published Applications

| init  | Cite.No. | Pub. No.    | Date       | Applicant  | Kind | Class | Subclass |
|---|----------|-------------|------------|------------|------|-------|----------|
|  | 1        | 20010043606 | 2001-11-22 | Han et al. |      | 370   | 395.1    |

**Signature**

|   |           |
|---|-----------|
| Examiner Name   | Date      |
|  | 23 Apr 07 |



|  |   |  |   |                      |                  |
|--|---|--|---|----------------------|------------------|
| FORM PTO-1439<br>MODIFIED                                |   | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |   | Application Number   | 10/684,282       |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   |  |   | Filing Date          | October 10, 2003 |
|  |   |  |   | First Named Inventor | Patrick Costello |
|  |   |  |   | Group Art Unit       | 2664 2616        |
|  |   |  |   | Examiner Name        | Wellington Chin  |
| Sheet  | 1 | of   | 1 | Attorney Docket No.  | 21863            |

| FOREIGN PATENT DOCUMENTS |          |                                 |                         |   |             |    |
|--------------------------|----------|---------------------------------|-------------------------|---|-------------|----|
| EXAMINER'S INITIALS      | Cite No. | Foreign Document Identification | PUBL. DATE (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | TRANSLATION |    |
|                          |          |                                 |                         |   | YES         | NO |
|                          | AA       | EP 1052814 A                    | 11-15-2000              | Nortel Networks                                 |             | X  |
|                          | AB       | WO 03/085909                    | 10-16-2003              | Cisco Technology                                |             | X  |

| PENDING U.S. PATENT APPLICATIONS |          |                    |                          |                   |
|----------------------------------|----------|--------------------|--------------------------|-------------------|
| EXAMINER'S INITIALS              | Cite No. | Application Number | Filing Date (MM-DD-YYYY) | Name of Applicant |
|                                  | AC       | 10/109,785         | 03-30-2002               | Bonomi et al.     |
|                                  | AD       | 10/339,032         | 01-09-2003               | Earl T. Cohen     |

| EXAMINER'S INITIALS | Cite No. | OTHER DOCUMENTS  |
|---------------------|----------|--|
|                     | AE       | NICK MCKEOWN, <i>The iSlip Scheduling Algorithm for Input-Queued Switches</i> , IEEE/ACM TRANSACTIONS ON NETWORKING, Vol. 7, No. 2, April 1999, pp. 188-201.   |
|                     | AF       | MCKEOWN ET AL., <i>Tiny Tera: A Packet Switch Core</i> , IEEE MICRO, Vol. 17, Issue 1, Jan.-Feb. 1997, pp. 26-33.  |
|                     | AG       | NICK MCKEOWN AND THOMAS E. ANDERSON, <i>A Quantitative Comparison of Scheduling Algorithms for Input-Queued Switches</i> , COMPUTER NETWORKS AND ISDN SYSTEMS, Vol. 30, No. 24, pp 2309-2326, December 1998. |
|                     | AH       | PANKAJ GUPTA AND NICK MCKEOWN, <i>Designing and Implementing a Fast Crossbar Scheduler</i> , IEEE MICRO, Vol. 19, Issue 1, Jan.-Feb. 1999, pp. 20-28.  |
|                     | AI       | WENZHE CUI ET AL., "A threshold based scheduling algorithm for input queue switch," IEEE, 2001, pp. 207-212.   |
|                     | AJ       | CHAO H J ET AL., "Centralized contention resolution schemes for a large-capacity optical ATM switch," ATM WORKSHOP PROCEEDINGS, 1998 IEEE, Fairfax, VA, USA pp. 11-16, May, 26, 1998.                        |

|                    |  |                 |           |
|--------------------|--|-----------------|-----------|
| Examiner Signature |  | Date Considered | 23 Apr 07 |
|--------------------|--|-----------------|-----------|

10/21/05

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

## Title of Invention

SLOW-START PACKET SCHEDULING PARTICULARLY  
APPLICABLE TO SYSTEMS INCLUDING A NON-BLOCKING  
SWITCHING FABRIC AND HOMOGENEOUS OR  
HETEROGENEOUS LINE CARD INTERFACES

Application Number : 10/684282



Confirmation Number: 3340

First Named Applicant: Patrick Costello

Attorney Docket Number: 21863

Art Unit: ~~2664~~ 2616

Examiner: Wellington Chin

Search string: ( 6757246 or 6262986 or 20030072326 or 20040165598 or 20040218600 ).pn

## US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

| init | Cite.No. | Patent No. | Date       | Patentee      | Kind | Class | Subclass |
|------|----------|------------|------------|---------------|------|-------|----------|
|      | 1        | 6757246    | 2004-06-29 | Alasti et al. |      | 370   | 230      |
|      | 2        | 6262986    | 2001-07-17 | Oba et al.    |      | 370   | 399      |

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

| init | Cite.No. | Pub. No.    | Date       | Applicant       | Kind | Class | Subclass |
|------|----------|-------------|------------|-----------------|------|-------|----------|
|      | 1        | 20030072326 | 2003-04-17 | Alasti et al.   |      | 370   | 462      |
|      | 2        | 20040165598 | 2004-08-26 | Shrimali et al. |      | 370   | 395.42   |
|      | 3        | 20040218600 | 2004-11-04 | Alasti et al.   |      | 370   | 389      |

## Signature

| Examiner Name | Date      |
|---------------|-----------|
|               | 23 Apr 07 |